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## Hydropower Investment Promotion Project (HIPP)

# GEORGIA

## UPDATE NO. 1 OF LEGAL AND REGULATORY REVIEW OF TURKISH ELECTRICITY SECTOR

THIS REVIEW IS UPDATE NO. 1 OF JUNE 10, 2010 LEGAL AND  
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# GEORGIA

## UPDATE OF LEGAL AND REGULATORY REVIEW OF TURKISH ELECTRICITY SECTOR

USAID HYDROPOWER INVESTMENT PROMOTION PROJECT  
(HIPP)

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## ACRONYMS USED IN THIS UPDATE

<b>EMRA</b>	Energy Market Regulatory Authority
<b>ENTSO-E</b>	European Network of Transmission System Operators for Electricity
<b>GSE</b>	Georgian State Electricity System Company
<b>HIPP</b>	Hydropower Investment Promotion Project
<b>MENR</b>	Ministry of Energy and Natural Resources
<b>MOU</b>	Memorandum of Understanding (“MOU”) executed 13 September 2007 between the Governments of Turkey and Georgia
<b>TEIAS</b>	Turkish Electricity Transmission Company
<b>TETAS</b>	Turkish Electricity Trading and Contracting Company

# **1. EXECUTIVE SUMMARY**

## **1.1 FINDINGS**

The author spent a further 5 days in Turkey in order to seek answers to a number of questions arising from the work which produced the Legal and Regulatory Review of Turkish Electricity Sector dated June 10, 2010 (“June, 2010 Legal Review”). Findings from this trip are as follows:

- Political considerations play an important part in determining whether and how potential barriers identified in the June, 2010 Legal Review are resolved. MENR, EMRA and TEIAS all recognize that concerns about long term guaranteed access to transmission capacity on the Borcka line are very real and pose a risk to the development of hydro power projects in Georgia seeking to sell output into Turkey.
- Discussions with the Georgian government and Georgian transmission company, and with MENR and TEIAS in Turkey, as well as between them, ought to be encouraged, in order to address:
  - the need of hydro power developers in Georgia to have guaranteed transmission capacity on the Borcks line and the uncertainties regarding the allocation rules that will apply;
  - uncertainties regarding responsibility for funding future needed transmission capacity on the Trukish side of the Borcka line;
- The Import-Export Regulation is presently being substantially revised, to comply with the ENTSO-E Rules. Discussions between EMRA and TEIAS are ongoing, with various key sections being amended. While the deadline for amendments to be finalized is prior to the planned synchronous interconnection of the Turkish transmission grid to the European grid on September 18, the target date is earlier.
- Changes to the electricity Market Law and Renewable Energy Law are also being considered.
- The Turkish electricity sector is still developing/evolving – many issues are being dealt with for the first time, including interconnection with Europe, growing imports from less developed neighbors to take advantage of Turkish electricity market prices, and growth in the number of private wholesale licensees seeking to import electricity into Turkey.

## **1.2 RECOMMENDATIONS**

The following recommendations are made:

- The changing legal and regulatory framework that governs Turkey’s electricity sector plainly needs to be monitored, particularly the Import-Export Regulation. A copy of the present draft, in Turkish, was obtained and key

sections are being translated, but the final version will need to be obtained as soon as it is available (hopefully in English).

- A transmission engineer ought to meet with the APK Department at TEİAŞ to discuss technical and engineering concerns of the HIPP team in respect of potential constraints on the Turkish transmission grid south and south-west of the Borcka line, and to gain a complete understanding of transmission pricing downstream of the Borcka line. One possible means of advancing these issues, if a transmission expert is not available to travel to Turkey, would be to submit written questions to APK.
- Obtain confirmation as to whether or not Turkish generators will in future be allowed to import power.
- Clarify the details surrounding the ability of distribution companies to import power and the regulation applicable to the price paid for the power will need to be obtained if relevant to the HIPP.

## **2. INTRODUCTION**

### **2.1 PURPOSE OF UPDATE**

The purpose of this update is to answer questions and address areas of uncertainty or concern arising from the June, 2010 Legal Review, and to answer additional questions that have arisen after further investigation by the Georgia Hydropower Investment Promotion Project (“HIPP”) team.

The HIPP’s objective is to support the Ministry of Energy of Georgia’s plan to develop Georgia’s abundant hydropower resources. It is funded by the U.S. Agency for International Development (“USAID”). The purpose of the June, 2010 Legal Review (and this Update) is to provide potential investors in Georgian hydropower projects with an overview of the legal and regulatory framework relating to the import into and sale of electricity in Turkey.

The questions from the HIPP team related principally to technical (transmission constraints) and pricing concerns on the Turkish side of the Borcka interconnection line.

This update is based on discussions with EMRA, MENR, Turkish Government-owned companies and legal counsel working in the electricity sector, over 5 days in July, 2010. Appendix A contains a list of individuals with whom the author met. The author is most grateful for the time these individuals gave and for their helpfulness, particularly at a busy time of year. The author particularly wishes to thank Uygur Yörük, Duygu Küçükbahar and Ekin Dogrusoz of Deloitte Turkey for their assistance.

The headings in this update for the most part correspond to those in the June, 2010 Legal Review.

### **2.2 THE TURKISH MARKET**

An update of the MENR demand forecast for Turkey should be ready in September, 2010, and available on the MENR website. The author was not able to obtain any new studies; however the following information was obtained from MENR: demand in the first 6 months of 2010 grew 6.6%; in 2009 it dropped by 2.3%; the average expected demand growth in the next few years is 7.8% annually (less than earlier figures of between 8-8.5% that we were given in May).<sup>1</sup> Total expected supply in 2020, earlier forecast to be 500 TWh, is forecast to be 400-430 TWh (2009 was 194 TWh), with installed capacity forecast to be 80-85,000 MW in 2020.<sup>2</sup>

The following general information regarding the electricity market in Turkey may be of interest.

There has been a lot of discussion recently of the renewable energy sector in Turkey, particularly stated aims to install 10,000MW of wind power. However, it will be some time before wind power offers real competition to Georgian investors. In a conversation with Ozlem Tabares<sup>3</sup>, the author learned that the wind energy sector is in a state of disarray. Some 10,000 MW of development has been targeted and projects totaling in excess of this amount have applied for licenses. EMRA was handling applications on the basis of the order, in time, in which they were received, however, EMRA staff have not been able to keep up and EMRA has decided to put all applications into one basket for evaluation as to whether they qualify for a license. Also, wind developers now have to compete for interconnection to the transmission grid – an additional, unknown cost; so developers are selling their rights or seeking investors.

It was later learnt that applications for wind power development licenses received by EMRA have been whittled down to 2,500 MW of actually viable projects.<sup>4</sup>

The solar power sector is not yet active because the legal framework is not yet in place, nor have the incentives been announced (EMRA needs to hire staff).<sup>5</sup>

The Legal Review noted the advantage that Georgian hydro power project developers enjoy because of the high water usage prices paid by Turkish hydropower developers to DTI, the Turkish water authority, under water usage agreements. These fees are expected to continue. The author was told that, while some quarters have questioned the rationale of the high water usage fees charged, the interest in building, and the flood of applications to build hydro power plants in Turkey has negated any pressure to reduce these charges.<sup>6</sup>

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<sup>1</sup>In May the estimates for year end growth in demand were between 8.5-9%. Hüseyin Onay, Head of Load Dispatch Department, TEİAŞ, at a 12 May 2010 meeting stated that current annual compound growth in demand is 7-8% and estimated that by the end of the year this figure would rise to 8.5-9; Mithat Yüksel, Head of Department, Department of Electricity Market Services, EÜAŞ, stated in a meeting held 11 May 2010, that growth in demand was currently around 7% and was estimated to reach 9% by the end of the year.

<sup>2</sup> Ozturk Selvitop, Head of Energy Markets Monitoring and Security of Supply, MENR, July 19 meeting ("MENR meeting")

<sup>3</sup> Ozlem Tavares, Odabas Tavares Law Office, meeting July 15 ("Tavares Meeting")

<sup>4</sup> Uygur Yoruk, Senior Manager, Deloitte Turkey, July 16 meeting ("Deloitte July 16 Meeting")

<sup>5</sup> Tavares Meeting

<sup>6</sup> MENR Meeting



The Market Law is also being amended, but not in relation to import-export. TEIAS is being given more autonomy and the rules requiring it to comply with procurement regulations are being relaxed. The amendments will not be finalized or effective until autumn of 2010 or 2011.<sup>7</sup>

## **2.2.1 EXISTING INTERGOVERNMENTAL AGREEMENTS**

EMRA confirmed<sup>8</sup> that the Electricity Protocol of 2005 signed between Turkey and Georgia relates only to the existing 150 MW transfer from Batumi to Hopa. TETAS is authorized to import electricity from Georgia using this line, but the Protocol does not constitute general authority for TETAS to purchase power from Georgia. TGR Enerji of Turkey has now received authorization in its wholesale license to import electricity using the Batumi to Hopa line when TETAS is not importing (and TETAS is not presently importing).<sup>9</sup>

The MOU similarly does not authorize TETAS to buy power from Georgia using the Borcka interconnection line, as it covers only the construction by TEIAS of the Borcka line.<sup>10</sup>

The Electricity Protocol provides for agreements to be signed between TEIAS and GSE covering technical transmission issues, and between TETAS and Adjara Energy Company Limited covering commercial and financial aspects relating to electricity sales.<sup>11</sup>

The Legal Review left open the question of whether the existence of an MOU between Georgia and Turkey related to imports from Georgia provides sufficient authorization for TETAS to become an off-taker for Georgian hydropower imports. It would not. While meeting at MENR, Ozturk Selvitop introduced the author to a member of the TETAS board, Nilgin Acikalin, who confirmed that the present MOU only authorizes the construction of Borcka and does not authorize TETAS to purchase imported power. Whether the government is considering or negotiating a new agreement covering the Borcka line, she was non-committal.<sup>12</sup> EMRA confirmed<sup>13</sup> that TETAS cannot import electricity without specific Turkish Government approval, pursuant to an intergovernmental agreement. This would be sufficient for TETAS to be authorized to be the wholesaler, if it mandates TETAS to purchase. It would be added to the Special Conditions in TETAS's license.

## **3. EXPORT-IMPORT OF HYDROPOWER TO TURKEY**

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<sup>7</sup> Uygar Yoruk, Deloitte Turkey, July 19 meeting ("July 19 Meeting")

<sup>8</sup> Ilker Ucler, Energy Expert, Electricity Market Department, EMRA July 16 meeting ("EMRA July 16 Meeting")

<sup>9</sup> Deloitte July 16 Meeting

<sup>10</sup> EMRA July 16 Meeting

<sup>11</sup> *Id.*

<sup>12</sup> Nilgin Acikalin, Deputy Head of Department, MENR, and TETAS Board member, July 19 meeting ("TETAS Board Member Meeting")

<sup>13</sup> *Id.*

## 3.1 TECHNICAL ISSUES REGARDING EXPORT-IMPORT OPERATIONS

Turkey is working to meet a deadline of September 18 for the trial interconnection with the European network, with Bulgaria (two connections) and Greece (one connection). This raises the question, whether import operations other than DC interconnections (in particular, “clustering” of small Georgian HPPs and operating them in island mode or redirecting them to Turkey) will be permitted after TEİAŞ becomes a member of ENTSO-E, provided such operations do not jeopardize the safety and security of grid operations in Turkey.

The author asked TEİAŞ<sup>14</sup> about this but Mr Nezir Ay said he needed specific information from his Georgian counterparts in order to assess whether islanding on the Georgia side would be possible (it is possible on the Turkish side). It would depend on the size of the cluster, as the existing transmission line is 250 MW, which is too big for small hydros such as, for example, a cluster of 50 MW. Technical or engineering transmission questions need to be directed to the APK Department, which is extremely busy presently (and, in the author’s view, would best be discussed with TEİAŞ by technical transmission experts). One possible means of advancing these issues, if a transmission expert is not available to travel to Turkey, would be to submit written questions to APK.<sup>15</sup>

It was suggested by MENR that Yildiz Durukan, Manager of TEİAŞ’s Europe Transmission Coordination Division might be able to answer questions about non-synchronous modes of interconnection other than through back-to-back converters, however her response<sup>16</sup> was simply that there would be no need for operating in island mode or redirecting generating units once the Borcka line is operational. Turkey has performed these modes of operation in the past – with Bulgaria, as well at Georgia – however, such operation in the future would (as is already understood) be subject to ENTSO-E approval.

## 3.2 IMPORT AUTHORIZATION PROCESS

### 3.2.1 LEGAL ENTITIES ALLOWED TO IMPORT

#### 3.2.1.1 DISTRIBUTORS AND RETAILERS

The author learnt in discussions at EMRA<sup>17</sup> that distribution licensees and retail licensees effectively may only import electricity if they are near an international border, because they do not have authority to import unless they actually construct a 36kV interconnection line. EMRA recognizes that the construction of such interconnection is unlikely, as demand growth is far from Turkey’s borders. Article 5(b) of the Import-Export Regulation, the provision that authorizes retail companies and distribution companies holding retail licenses to import power, is really a

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<sup>14</sup> Nezir Ay, Head of Electricity Market Services and Financial Settlement Department, July 13 meeting (“Ay TEİAŞ Meeting”)

<sup>15</sup> *Id.*

<sup>16</sup> Yildiz Durukan, Manager Europe Transmission Coordination Division, TEİAŞ, July 19 meeting (“Durukan TEİAŞ Meeting”)

<sup>17</sup> Oytum Alici, Energy Expert, and Ilker Ucler, Energy Expert, Electricity Market Department, EMRA, July 13 meeting (“EMRA July 13 Meeting”)

recognition of the existing line between Turkey and the Nakhchivan Autonomous Republic. Metin Gunyol<sup>18</sup> also confirmed that retail and distribution licensees may only import power physically, utilizing an interconnection line of 36kV or less.

The Legal Review also left open the question of whether private distribution companies in Turkey can construct generating facilities, or purchase from affiliated generation units, in another country. EMRA confirmed that there is nothing preventing a private distribution company licensee from constructing generation in another country, subject to meeting the separation requirements, but purchases must be by the retail licensee.<sup>19</sup> The price a distribution company pays if it purchases from an affiliated wholesale company or a generator is regulated – it is restricted to 13.28 Turkish kuruş/kWh (the average wholesale price in Turkey in 2009).

A public distribution company, however, cannot build generation. Public distribution companies purchase from TETAS, EUAS or in the spot market if they have a deficiency, and cannot own more than 20% of the total generation market in Turkey.<sup>20</sup> In the limited time available the author was not able to fully explore these issues, and acknowledges that some further clarification may be required.

### **3.2.1.2 GENERATORS**

Under the existing Import-Export Regulation, generators cannot import electricity (unless they form a separate wholesale company). This is potentially an issue in terms of compliance with ENTSO-E requirements, as ENTSO-E allows generators to import. Whether Turkey changes the law in this regard is still being decided. Yildis Durukan, who heads ENTSO-E compliance issues at TEIAS, told the author<sup>21</sup> that the draft Import-Export Regulation does include authority for generators to import (although the author may have misunderstood, as there was no translator present). However, MENR also informed the author that generators could well be authorized to import in future.<sup>22</sup> Confirmation of what is decided ought to be obtained.

### **3.2.1.3 TETAS**

Regarding the possibility of TETAS being a purchaser of imported power from Georgia, EMRA confirmed<sup>23</sup> that TETAS is not permitted to sign any new electricity purchase contracts other than for the purpose of meeting the demand of its existing customers. EMRA has refused several requests from large customers not already supplied by TETAS to allow TETAS to sell to them. This is not a limitation in any law but is TETAS's role as described in its license. TETAS has 5 year "interim" contracts

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<sup>18</sup> Head of International Relations Department, TEIAS, July 13 meeting ("Gunyol TEIAS Meeting")

<sup>19</sup> EMRA July 16 Meeting

<sup>20</sup> MENR Meeting

<sup>21</sup> Durukan TEIAS Meeting

<sup>22</sup> MENR Meeting

<sup>23</sup> EMRA July 13 Meeting

that were put in place with distribution licensees during privatization of the distribution companies and these have been extended for a further two years.

The author was shown TETAS's license, but was not allowed to take a copy; although the information is public, the document itself is proprietary to TETAS. The Special Conditions of TETAS's license contain the authorizations granted by EMRA; it essentially lists the present contracts that TETAS has. All are either (i) pursuant to inter-governmental agreements (all of which are purchase contracts except Syria, which is a sales contract) or (ii) existed prior to the Market Law being passed in 2001. EMRA recognizes intergovernmental agreements, which, once approved by Parliament, have the force of law.<sup>24</sup>

MENR<sup>25</sup> also later advised that there is no need to look to TETAS to be an importer/consolidator – a generator can form a Turkish-licensed wholesaler to perform importation. During this meeting with Ozturk Selvitop, a TETAS board member confirmed that TETAS cannot sell imported power unless authorized by the government.<sup>26</sup>

In addition, it was confirmed that TETAS contracts can only be for a one year duration unless a longer period is mandated by the government (as was the case with the recently signed 15 year nuclear deal).<sup>27</sup>

### **3.2.1.4 PRIVATE WHOLESALERS**

Based on the foregoing, it appears that only private wholesale licensees (and TETAS if it is authorized to do so pursuant to an inter-governmental agreement) will be able to import electricity from Georgia using TEIAS lines. The purpose of Article 5(b) in the Import-Export Regulation was to encourage cross-border trade between neighboring countries in specific regions.<sup>28</sup> There is no legal restriction on distribution or retail licensees building high voltage transmission lines for import or export purposes but the huge investment involved is obviously prohibitive (and it is unlikely Turkish Government approval would be forthcoming).

We learned that private wholesalers are to be given the opportunity to bid to purchase interconnection capacity via the internet. The authority to import is added as a special condition to the wholesale license (that is, EMRA confirmed there is no separate import license).

### **3.2.2 APPLICATION PROCESS**

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<sup>24</sup> *Id.*

<sup>25</sup> MENR Meeting

<sup>26</sup> TETAS Board Member meeting

<sup>27</sup> EMRA July 13 meeting

<sup>28</sup> *Id.*

Allocation of capacity on the Borcka line depends on first having obtained capacity on transmission lines in Georgia. In discussions with EMRA and MENR<sup>29</sup>, it became clear that importers are required to take the following steps:

- To obtain an allocation of capacity an application is made to EMRA;
- In order to be considered by EMRA the applicant must also submit an “intention” letter from Georgia showing that the applicant has secured capacity on the Georgian side of the international interconnection. It was unclear whether the letter should be obtained from the Georgian government or the Georgian transmission company, GSE; however EMRA suggests that the intention letter should also secure a guarantee from the Georgian Government that Georgia will not grant rights to already allocated capacity to other parties to any other person;
- EMRA obtains the opinions of (i) MENR, in terms of political issues, and (ii) TEIAS on technical aspects. TEIAS cannot clear technical aspects without agreement with its Georgian counterpart;
- TEIAS publishes a notice on the internet giving interested parties 10 days to apply for the capacity. If there is only one applicant, that applicant gets the capacity rights and has the import authorization added to its license. Non-allocated capacity is again advertised on TEIAS’s website.

Thus an importer will not obtain import authorization from EMRA or capacity on the Borcka line without Georgia’s support. This was later confirmed by MENR<sup>30</sup> – that is, that EMRA will require an importer to provide an agreement with GSE. However, Georgia has issued only one intention letter in the last 6 years. In fact, according to EMRA, Georgia is apparently telling entrepreneurs that they will not be given rights to capacity unless they make an investment in hydro power in Georgia, as the Georgian government sees no reason to enable traders to benefit from the price differences between Georgia and Turkey.<sup>31</sup>

### 3.2.3 POLITICAL CONSIDERATIONS

Ultimately, decisions in respect of international interconnections and the import of electricity into Turkey, are political matters rather than purely technical matters. Imports are subject to the policies of the Turkish government, which makes the ultimate decision. Thus, while applications for capacity are made to EMRA under the Import-Export Regulation, according to EMRA,<sup>32</sup> it is advisable to also approach MENR.<sup>33</sup> EMRA also said one would be at risk without some agreement with the Turkish government, as the government could in future decide that no more imports

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<sup>29</sup> *Id.*

<sup>30</sup> MENR Meeting

<sup>31</sup> EMRA July 13 Meeting

<sup>32</sup> EMRA July 13 Meeting

<sup>33</sup> Ozturk Selvitop has recently been confirmed by the Minister of Energy and Natural Resources as Head of Energy, Market Monitoring and Security of Supply (he had been acting), one of the four department heads in the General Directorate of Energy. He is the person who handles international transmission interconnection issues, and so is the person from whom EMRA seeks the Turkish Government’s view on international interconnections.

of power into Turkey are to occur from a particular country, or that no more imports are needed.<sup>34</sup>

MENR itself will obtain the view of the Ministry of Foreign Affairs if necessary. Later, in discussions at MENR<sup>35</sup>, the author was given two recent examples of political policy dictating whether or not TEIAS would conduct imports or exports of electricity: Exports to Greece in 2008 were ordered by the Minister of Energy to assist Greece in meeting summer demand, albeit at a time when Turkey faced a potential shortage; imports from Armenia were refused in 2009 on the basis of not being possible for political reasons.

In the view of an Ankara attorney the author discussed the political overlay issue with<sup>36</sup>, it would be best to get the two governments together, most likely through each respective Ministry, to agree on a process for joint approval of export/imports. Otherwise the developer will have to apply to the Georgian government for development and associated rights (including transmission) without knowing if it can get import authorization from EMRA and transmission rights on the Borcka line. A procedure needs to be agreed between both GSE and TEIAS, as well as the two governments, that does not whipsaw hydropower developers in Georgia seeking to reach export markets in Turkey.

## **4. ALLOCATION OF INTERCONNECTION AND TRANSMISSION CAPACITY**

### **4.1 INTERCONNECTION CAPACITY**

#### **4.1.1 ONE YEAR LIMIT ON INTERCONNECTION CAPACITY**

The method of allocating capacity on international interconnections is different for interconnections where the two countries' systems are synchronous (monthly bidding is to be introduced) and where they are not, for example the Borcka line presently being constructed between Georgia and Turkey (allocated for a maximum period of one year). The Import-Export Regulation, which currently imposes a one year limit on the allocation of capacity under all international interconnections, is presently being substantially revised, to comply with ENTSO-E requirements.<sup>37</sup> EMRA and TEIAS are deep into discussions on the new draft regulation, in time to meet the planned synchronized interconnection between Turkey and Bulgaria (at two points) and Greece (one point) on September 18, 2010. The author was informed that there is secondary legislation in the form of a Communiqué governing bidding for capacity, but it will change along with the Import-Export Regulation<sup>38</sup>, a copy of the latest draft

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<sup>34</sup> *Id.*

<sup>35</sup> MENR Meeting

<sup>36</sup> Tavares Meeting

<sup>37</sup> *Id.*

<sup>38</sup> *Id.*

of which was obtained, in Turkish.<sup>39</sup> It is apparent that significant changes are under discussion.

It is understood that one of the key issues to be agreed between TEIAS and EMRA is whether the new rules governing the allocation of connection and capacity on synchronized international interconnections (monthly auctions, going to weekly and daily auctions after the first year) will also apply to the Borcka line. Further, it is understood that the Borcka interconnection, because it will operate as a direct current line between the two grids with back-to-back AC/DC converters, falls within an exemption to ENTSO-E, but this needs to be checked. Essentially, it could be considered as synchronous. However, this will depend upon the approach that TEIAS adopts. As the Borcka line is under construction and there have been no applications for capacity on Borcka, it is not known what TEIAS's approach will be.<sup>40</sup> Indeed, there is no pressing need for a decision at this time.

Rasit Sarikaya discussed with TEIAS, after meetings with the author in May, the new draft Import-Export Regulation, and believes that the Regulation is being amended to provide for long term contracts under which allocations of transmission capacity on international interconnections are needed for private investors making decisions to build power plants. His advice is for a developer to seek long term capacity from TEIAS – with details of the likely term of the PPA and amount of capital involved in the project.<sup>41</sup> However, EMRA confirmed in a later meeting<sup>42</sup> that the amendments to the Import-Export Regulation do not in fact include provision of long term capacity allocation on the Borcka line, and that one would need an intergovernmental agreement with Georgia to obtain long term rights.

EMRA asks MENR each year about the one year limit on capacity allocation; MENR's attitude is that it has no problem with longer term rights, but that the issue is how allocation will be calculated if more than one importer seeks to use the international interconnection.<sup>43</sup>

EMRA also said a provisional article in the Import-Export Law states that if the government decides a project is desirable, capacity for a longer period could be allocated. Attempts to locate this article have not yet succeeded. Also, all isolated imports into Turkey are pursuant to intergovernmental agreements, and these can override the one year allocation in the Import-Export Regulation.

The author received confusing messages as to what TEIAS will decide. Turkey's Deloitte office<sup>44</sup> believe that monthly auctions of capacity will have to be introduced on the Borcka line, and MENR<sup>45</sup> believe that EMRA will find a solution to the one year limitation issue. EMRA itself has no problem with the principle of capacity

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<sup>39</sup> Uygur Yoruk, Senior Manager, Deloitte Turkey, July 19 meeting ("Deloitte July 19 Meeting")

<sup>40</sup> MENR Meeting

<sup>41</sup> Sarikaya Meeting

<sup>42</sup> EMRA July 16 Meeting

<sup>43</sup> MENR Meeting

<sup>44</sup> Uygur Yoruk, Senior Manager, Deloitte Turkey July 19 meeting ("Deloitte July 19 Meeting")

<sup>45</sup> MENR Meeting



allocation longer than one year, and sees no reason why an applicant should not seek longer term capacity, albeit that this is a governmental matter to be decided by MENR<sup>46</sup>.

The author later met with Yildiz Durukan, Manager at TEIAS of the Europe Transmission Coordination Division<sup>47</sup>, and she confirmed that there are no plans currently to change the method of allocation for the Borcka line from what the present Import-Export Regulation says. Deloitte Turkey's view is that there is no point in having annual allocation if there is competition for the line and the line is accepted by ENTSO-E as being analogous with synchronization. Uygur Yoruk would expect there to be auctions for such a large capacity.<sup>48</sup>

In conclusion, it would be wise to monitor changes to the draft Import-Export Regulation as it is finalized, and then have the final Regulation translated.

#### **4.1.2 ALLOCATION OF INTERCONNECTION CAPACITY**

If there are two interested parties and the capacity of the line is not sufficient, EMRA does not know what TEIAS would decide, as this situation has not arisen before but presumes that TEIAS would institute an auction to enable the parties to compete for it<sup>49</sup>. The same applies where in future another party seeks capacity on an international interconnection already being used by a wholesaler and the total sought exceeds the capacity of the line. This has never happened, but it is most likely TEIAS would conduct an auction and allocate accordingly.<sup>50</sup> The general rules in the (present) Import-Export Regulation about non-discrimination, and the rules around grid investment financing and construction apply and work well in relation to Turkey's transmission system, but do not work for international interconnections.<sup>51</sup>

The rules in respect of grid investment were not designed to apply to international interconnections, as such interconnections have been constructed and operated pursuant to intergovernmental agreements (although private wholesaler TRG Enerji has recently been granted authorization to import power on the Hopa line). In terms of the Turkish grid, TEIAS has the statutory obligation to operate and manage the system, to ensure there is no congestion. For international interconnections, unless TEIAS decides to invest, an importer is in competition for capacity, or the importer can build a line (with intergovernment agreement).<sup>52</sup>

The Legal Review left open the question under what circumstances EMRA could refuse to "roll over" or reauthorize the annual allocation of interconnection capacity to an importer that met all of the requirements specified in the Import-Export Regulation. According to Turkish legal experts working in the energy sector, TEIAS

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<sup>46</sup> EMRA July 13 Meeting

<sup>47</sup> TEIAS Durukan Meeting

<sup>48</sup> Deloitte July 19 Meeting

<sup>49</sup> EMRA July 13 Meeting

<sup>50</sup> *Id.*

<sup>51</sup> TEIAS Gonyol Meeting

<sup>52</sup> EMRA July 13 Meeting



will always renew if a licensee performs and applies each year. There are examples of very long term capacity rights (ie. rights that have been renewed each year), albeit on the Turkish transmission grid.<sup>53</sup>

In answer to the question, is there any preference given to existing shippers in allocating interconnection capacity in the event of congestion, the author was told that the annual capacity allocations are performed each year – there is no priority given to existing users.<sup>54</sup>

With respect to whether renewable energy is given preference over other energy in allocating capacity, the author was informed that this preference only applies to renewable energy from Turkey.<sup>55</sup> It would not apply to renewable energy from Georgia.

Article 16, which states that agreements concluded by applicants with legal entities in other countries are not to be taken into account in the allocation of interconnection line capacity is simply confirming the legal position that TEIAS does not have to consider PPAs that may have been signed by parties that seek to obtain capacity on the Borcka line.<sup>56</sup>

#### **4.1.3 CONSTRUCTION OF NEW INTERNATIONAL INTERCONNECTION**

The Legal Review posed the question, is only TEIAS permitted to construct interconnection capacity at the international border or can distribution licensees and retail licensees also construct international interconnection capacity? Other licensees can construct under supervision of TEIAS, but ownership of the assets always remains with TEIAS.<sup>57</sup> In fact, TEIAS has never adopted this route, TEIAS informed the author that, because of the system studies that must be performed only the system operator (TEIAS) is able to do these.<sup>58</sup>

The rules regarding construction of lines and obtaining 50% or more access do not apply to Borcka, which is being constructed under intergovernmental agreement. The author later asked TEIAS<sup>59</sup> if the rules relating to upgrades of the Turkish transmission system apply to international interconnections. They do not. International interconnections can only be constructed if the two governments agree, so any needed increase in capacity would have to be pursuant to intergovernmental agreement.

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<sup>53</sup> Rasit Sarikaya, Serdar Çirak and Gokce Karakaya Gul; Sarikaya Law Office, July 15 meeting (“Sarikaya Meeting”)

<sup>54</sup> *Id.*

<sup>55</sup> Tavares Meeting

<sup>56</sup> Deloitte July 16 Meeting

<sup>57</sup> TEIAS Gunyol Meeting

<sup>58</sup> TEIAS Gunyol Meeting

<sup>59</sup> *Id.*

The Legal Review asked how Article 21 of the (present) Import-Export Regulation, under which wholesale licensees can be required to construct international interconnection capacity in order “to increase trade and competition in the electricity market,” has been interpreted by EMRA? Would this permit a distribution company to compel a wholesaler to construct such capacity to import Georgian hydropower, if capacity on the new transmission line becomes congested? Does this apply only to “private” wholesale licensees or also to TETAŞ?

In response to these questions, TEIAS’ representative stated that the transmission company calculates the “Net Transfer Capacity” (the maximum quantity that can be supplied/offtaken calculated for an international interconnection). It publishes the available NTC on its website and users purchase capacity. If time is of the essence and TEIAS cannot perform a needed system upgrade to increase NTC, a wholesaler can be required to do the upgrade.<sup>60</sup> It is generally acknowledged that Article 21 of the present Import-Export Regulation (the English translation of which states that TEIAS or distribution licensees “may make wholesale licensees to construct” interconnection lines in order to increase trade and competition in the electricity market) does not mean TEIAS (or a distribution company in relation to 36 kV lines between a distribution licensee’s system and a bordering country) can force a wholesaler to finance or build an interconnection – the wholesaler must agree.<sup>61</sup> On checking the Turkish official version of the Article, it does actually say that that TEIAS can compel, but according to Uygur Yoruk of Deloitte Turkey, this is not how it would be interpreted by EMRA. Article 21 applies only to international interconnections, and it would not be possible to compel a wholesaler to construct a new line or increased capacity. Large parts of this Article have been deleted – and so there is a need to monitor the amendments. Wholesalers can also agree to have more than 50% of the capacity until it has been repaid.<sup>62</sup>

The rules applying to decisions as to new investment on the Turkish grid (not discussed here) do not apply to international interconnections. TEIAS’s view is that another inter-governmental agreement would probably be necessary if an increase in capacity on Borcka was required. In other words, when importers of electricity from Georgia require more capacity, they will need to persuade the Turkish government of the need.<sup>63</sup>

## **4.2 TRANSMISSION CAPACITY**

### **4.2.1 ALLOCATION OF TRANSMISSION CAPACITY**

As noted above, no preference is given to existing shippers or to energy from renewable resources originating outside Turkey in allocating interconnection capacity in the event of congestion. Similarly, no preference is given to existing shippers or to

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<sup>60</sup> *Id.*

<sup>61</sup> EMRA July 13 Meeting and Deloitte July 16 Meeting

<sup>62</sup> Deloitte July 19 Meeting

<sup>63</sup> EMRA informed the author that it has heard that a consortium in Georgia is building another transmission line for interconnection to Turkey that has greater capacity than 650 MW.

renewable energy from outside Turkey in allocation of transmission capacity on the Turkish grid. Capacity is allocated on the Turkish transmission grid in accordance with the Turkish rules without regard to the origin of the electricity.

#### 4.2.2 CONSTRUCTION OF TRANSMISSION CAPACITY

The HIPP team has become concerned about possible congestion on the Turkish transmission grid caused by imports of electricity using the Borcka line, in particular about constraints in the ability to deliver power to Turkish summer markets and possible recourse or alternative routes. It was originally planned to conduct meetings at TEIAS with a transmission engineer from the HIPP team, however such an expert was not available. TEIAS personnel, particularly the AKP Department, should still be consulted by someone from the HIPP team with transmission expertise.

In discussions at MENR, Ozturk Selvitop noted<sup>64</sup> that during discussions between Turkey and Georgia on the MOU in respect of the construction of the Borcka line, the Georgians wanted to extend the line's capacity to 1000 MW from the outset. However, TEIAS resisted this, as it saw no need to make the required investments on the Turkish side to support 1000MW at this stage; TEIAS does not wish to make capital investments until it is clearly necessary. Deloitte Turkey confirmed that it can safely be assumed that the Turkish grid will not support more than 650MW of imports using the Borcka line.<sup>65</sup>

The Legal Review asked whether, in the event congestion occurs in the future, can potential offtakers of Georgian hydropower finance system expansions on TEIAŞ downstream of the Borçka line (assuming it would be economically feasible), under the provisions of Article 38 of the Licensing Regulation.<sup>66</sup>

Article 38 of the Licensing Regulation only relates to connection to the transmission grid and circumstances where expansion investment or new investment is required; it does not deal with the use of the system by wholesaler licensees. There is, therefore, an issue as to who finances any needed investment in Turkey to support imports from Georgia that has not yet been considered by EMRA or TEIAS.

In asking TEIAS<sup>67</sup> about this issue, specifically possible congestion on the 380 kV line south of Borcka and Deriner, the author was told simply that TEIAS is responsible for the efficient operation of the entire Turkish transmission system and cannot allow congestion to occur, and the fact power is flowing from Georgia is

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<sup>64</sup> MENR Meeting

<sup>65</sup> Deloitte July 19 Meeting

<sup>66</sup> Which, in relevant part, states, "in cases where system expansion investment or new investment is required due to insufficient capacity regarding system use and if the necessary financing is not present, such investments may be performed or financed by the real person or legal entity requesting connection to the system in line with the technical standards indicated in the applicable legislation, on behalf of TEIAS and/or distribution licensee. In such cases, total cost of the actual investment shall be deducted from the transmission and/or distribution tariff charges within the framework of the connection and system use agreement to be signed between the real person or legal entity connecting to the system and TEIAS and/or distribution licensee."

<sup>67</sup> Metin Gunyol, Head of International Relations Department, TEIAS, meeting on July 13 ("TEIAS Gunyol Meeting")

irrelevant. If there is insufficient capacity, new or additional investment will be made. If time was of the essence, TEIAS could agree with a wholesaler for the wholesaler to make the necessary investment (TEIAS would own the assets and the wholesaler would be reimbursed through lower usage tariffs). Yildiz Durukan of TEIAS believes that the maximum payback period with TEIAS is 10 years.<sup>68</sup> However, as mentioned above, it was not possible to get a clear answer on whether the wholesaler could be compelled to make the investment, possibly because the relevant article covering wholesale licensees relates to international interconnections.

In other words, in terms of the Turkish grid, TEIAS has the statutory obligation to operate and manage the system, including to ensure there is no congestion. The author was unable to obtain any further insight into how TEIAS would decide who is responsible for the costs of new transmission investment caused by imports from Georgia.

Metin Gunyol<sup>69</sup> told the author that the planned second line from Borcka, that runs south to Yusefeli substation and on to Erzerum, that the HIPP team asked about, has been completed.

## **5. REGULATED TARIFFS AND MARKET BASED PRICING**

### **5.1 TRANSMISSION TARIFFS**

The author was not able to obtain a specific answer to the question, under what conditions TEIAS would be able to exercise the force majeure right to request a change in the level of its transmission tariff or a change to the terms and conditions in a transmission service agreement. However, TEIAS (and TETAS) is able to apply to EMRA at any time for an increase in its tariff to recover increases in its costs (for example, repairs after a storm), and EMRA receives frequent applications from both companies. An example given to the author is an application to recover losses caused by movements in the exchange rate in the U.S. dollar or where the company has had to purchase more quantities in the spot market.<sup>70</sup>

Rashit Sarikaya of the Sarikaya Law Office has some experience of litigation regarding force majeure under Turkish government contracts, of which the author was told there are many such cases in Turkey. He recently acted for TETAS in litigation with Kartet, an exporter of electricity to northern Iraq that bought power from TETAS to sell to Iraq and sued TETAS when delivery failed because of weather conditions (the claim was for \$61m). The Commercial Court in Ankara upheld TETAS's argument that it was force majeure under the negotiated contract between Kartet and TETAS. The author was also informed that force majeure provisions under negotiated contracts can be expanded through negotiation, although no details as to exactly how, were obtained, nor is it clear how this fits with the rule that

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<sup>68</sup> TEIAS Durukan Meeting

<sup>69</sup> TEIAS Gunyol Meeting

<sup>70</sup> EMRA, July 16 meeting

transmission contracts are models that cannot be changed without EMRA Board approval.<sup>71</sup>

TEIAS's current transmission tariffs for each region now number 15 rather than the previous 22, and these apply to 81 regional connection points (both attached as Appendix B). Tariff number 15 is the applicable tariff for international interconnections, including the Borcka line. EMRA's tariff experts were unavailable to meet with the author so the author was unable to get an explanation of how to calculate the tariff for transmission from the border to the south or west. An explanation has been requested, and is awaited.

## **5.2 MARKET BASED GENERATION TARIFFS**

As mentioned in the June, 2010 Legal Review, there are no regional market prices for electricity yet in Turkey, however Turkey plans to move to regional prices. Deloitte Turkey's present pricing model (a more sophisticated model is being developed) forecasts an average price of US\$105/MW over the next 20 years, although it is noted that the impact of future cross-border flows is too difficult to assess accurately.<sup>72</sup>

### **5.2.2 RENEWABLE ENERGY LAW**

Ozturk Selvitop advised that the feed-in tariffs presently under discussion are: wind, 6.5 cents; solar 13 cents.<sup>73</sup> The Turkish Treasury and the Minister of Energy have not been able to agree on the tariffs, so this has been postponed for the time being (Parliament closed Friday July 23 and does not resume until October 1).<sup>74</sup> While the feed-in tariffs do not apply to imported power from renewable energy sources, if Turkey adopts a mandatory renewable portfolio standard (currently utilities have to buy renewable power that is offered to them but are not obligated to buy power if it is not offered to them), Georgian hydropower would compete against these tariffs.

## **6. POTENTIAL OFFTAKERS AND TRANSACTION STRUCTURES**

A number of questions regarding potential offtakers were left open in the June, 2010 Legal Review, and are dealt with here. Regarding TETAS's possible role as a purchaser of imported electricity, as mentioned, TETAS must have specific Turkish government authority for it to purchase imported power.

With respect to Organized Industrial Zones ("OIZs"), the author understands that the regulations governing do allow for OIZs indirectly to be off-takers of Georgian hydropower (even though they themselves could not import power), by purchasing

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<sup>71</sup> Sarikaya Meeting

<sup>72</sup> Deloitte July 19 Meeting

<sup>73</sup> Information on proposed tariffs for hydropower was not available.

<sup>74</sup> MENR Meeting

imported power from a wholesaler.<sup>75</sup> The regulation is administered by the Ministry of Industry, but is not available in English.

The Legal Review left open the question of whether the plans to separate the functions of distribution, production and retail sales by January 1, 2013 would have an impact on Turkish distribution companies wanting to own generation capacity in Georgia. MENR informed the author that plans remain to have full corporate separation by this date, but it was not possible to explore whether this will have any impact on Turkish distribution companies owning generation in Georgia. Six of 21 distribution licensees have now been sold, and the remainder will be sold by year end. They have PPAs with EUAS and TETAS but these are not long term.<sup>76</sup>

## **7. CONCLUSION AND RECOMMENDATIONS**

- The Continued monitoring of the development of Turkey's electricity sector laws and regulations is recommended – particularly the amendments to the Import-Export Regulation presently being decided between TEİAŞ and EMRA – as investors and lenders will need this information to assess the risks in the legal and regulatory environment in Turkey and policy makers will need to understand what structures/regulations are needed to attract financial support.
- Confirmation was obtained of the need for a developer to conclude an agreement with the Georgia transmission company before any allocation can be made by TEİAŞ, and that ultimately international interconnections are subject to political decision.
- An approach ought to be developed to get the political involvement of both sides and a set of recommendations for a possible new Memorandum of Understanding between Georgia and Turkey to mitigate some of the perceived risks related to the Borcka interconnection, and which will bring into the open the major issue of guaranteed capacity on the Borcka line.
- Some analysis of ENTSO-E prohibitions on island mode operations and redirecting generators on non-synchronous interconnections would be beneficial.
- Technical transmission-related issues ought to be explored between experts from the HIPPP team and TEİAŞ.
- Some questions from the Legal Review were not able to be fully explored in the time available, and could usefully form the basis of future discussions. These include:
  - whether the restriction on private distribution companies limiting them to purchasing from an affiliated generation company no more than 20% of the total volume of electricity distributed by them in their authorized

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<sup>75</sup> EMRA July 16 Meeting

<sup>76</sup> MENR Meeting

region in the previous year applies to Turkish distributors buying from affiliated generators in Georgia;

- whether there are the maximum import terms and quantities allowed for private wholesalers under the Import-Export Regulation and whether these limits apply to distribution companies holding retail licenses.

## **APPENDIX A: MEETINGS AND CONTACT INFORMATION**

13 July, 2010 – Oytun Alici, Energy Expert, Electricity Market Department; and Ilker Üçler, Energy Expert, Electricity Market Department, EMRA

13 July, 2010 – Celal Ustaoglu, Board Member and Commissioner, and Ayca Eroglu, Energy Expert, EMRA

13 July, 2010 – Ekin Dogrusoz, intern, Deloitte

13 July, 2010 – Metin Guryol, Head of International Relations Department, TEİAŞ

13 July, 2010 – Nezir Ay, Head of Electricity Market Services and Financial Settlement Department, TEİAŞ

15 July, 2010 – Ozlem Adabas Tavares, Odabas Tavares Law Office

15 July, 2010 – Rasit Sariyaka, Serdar Çirak and Gokce Karakaya Gul; Sariyaka Law Office

16 July, 2010 – Ilker Ucler, EMRA

16 July, 2010 – Uygar Yörük, Senior Manager, Deloitte Consulting, Energy & Resources (Turkey)

19 July, 2010 – Oztürk Selvitop, Head of Division, General Directorate of Energy Affairs, MENR and Nilgin Acitalin, TETAŞ Board Member

19 July, 2010 – Yildis Durukan, Manager, Europe Transmission Coordination Division, TEİAŞ

19 July, 2010 – Uygar Yoruk, Deloitte



## APPENDIX B: TRANSMISSION TARIFFS

1. Table of new transmission tariffs to apply throughout Turkey (15 different tariffs)



1617.pdf

2. Table identifying the transmission connection points to which the 15 transmission prices apply (there are 15 prices and 81 regions with numerous connections)



transmission  
prices.docx

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